ADDITIONAL MATERIALS TOWARD A MONOGRAPH OF THE GENUS CALLICARPA. I

Harold N. Moldenke

This is the thirtieth in my series of works of monographic nature on the genera of Verbenaceae, Avicenniaceae, Stilbaceae, Chloanthaceae, and Symphoremaceae. Previous genera so treated by me are Acantholippia Griseb., Aegiphila Jacq., Amasonia L. f., Avicennia L., Baillonia Bocq., Bouchea Cham., Casselia Nees & Mart., Castelia Cav., Chascanum E. Mey., Citharexylum B. Juss., Cornutia Plum., Diostea Miers, Dipyrena Hook., Hierobotana Briq., Lippia Houst., Parodianthus Troncoso, Petitia Jacq., Petrea Houst., Priva Adans., Pseudocarpidium Millsp., Recordia Moldenke, Rehdera Moldenke, Rhaphithamnus Miers, Stylodon Raf., Svensonia Moldenke, Tectona L. f., Verbena [Dorst.] L., and Vitex Tourn. The New World and cultivated members of the genus Callicarpa were also treated by me in this fashion in Fedde, Repert. Spec. Nov. 39: 288—317 and 40: 38—131 (1936). In order to conserve space, material recorded in this previous work is not repeated here except where it needs addition or emendation.

The list of abbreviations employed by me in the citation of specimens, as given in Phytologia 5: 154--159 (1955) and added to in later monographs, is repeated herewith for convenience because of the numerous necessary additions and emendations over the past eleven years. My reasons for employing these short abbreviations, rather than the often very much longer ones recommended by the international committee, are stated in the 1955 work and in previous publications. As of this writing, I have examined and formally annotated 194,873 herbarium specimens from 284 institutional and private herbaria.

A = Arnold Arboretum Herbarium, Harvard University, Cambridge, Massachusetts
Aa = H. Ahles Herbarium, University of North Carolina, Chapel Hill, North Carolina
Ac = Botanisk Institut, Aarhus Universitet, Aarhus, Denmark
Ad = Universidad de los Andes, Mérida, Venezuela
Af = National Herbarium, Pretoria, Transvaal, South Africa
Ag = Carlos Muños Herbarium, Ministerio de Agricultura, Santiago, Chile
Ah = J. C. Arthur Herbarium, Purdue University, Lafayette, Indiana
Ak = Alan Hancock Foundation, University of Southern California, Los Angeles, California
Ał = New York State Museum, Albany, New York
Am = Southwest Research Station, American Museum of Natural History, Portal, Arizona
An = Institut Français d'Afrique Noire, Dakar, Senegal
Ar = United States National Arboretum, Washington, D. C.
As = C. F. Asenjo Herbarium, University of Wisconsin, Madison, Wis-

consin
Au = University of Texas, Austin, Texas
Av = Facultad de Agronomía y Veterinaria, Universidad de Buenos Aires, Buenos Aires, Argentina
B = Botanisches Museum und Garten, Berlin-Dahlem, Germany
Ba = Bailey Hortorium, Cornell University, Ithaca, New York
Bb = Barbados Museum and Historical Society, Bridgetown, Barbados
Bc = Barnard College Herbarium, New York Botanical Garden, New York City
Bd = Herbarium Bradeanum, Rio de Janeiro, Brazil
Be = Instituto Agronomico de Norte, Belém, Brazil
Bf = Instituto de Botánica y Farmacologia, Buenos Aires, Argentina
Bg = Bergens Museum, Bergen, Norway
Bh = Instituto Agronomico do Servico Publica de Estado, Belo Horizonte, Brazil
Bi = Bernice P. Bishop Museum, Honolulu, Hawaii
Bj = B. J. Bayer Herbarium, Jamaica, New York
Bk = Royal Forestry Department, Bangkok, Thailand
Bl = University of Colorado, Boulder, Colorado
Bm = British Museum of Natural History, London, England
Bn = Central College, Bangalore, Mysore, India
Bo = Instituto de la Salle, Bogotá, Colombia
Br = Jardin Botanique de l'Etat, Brussels, Belgium
Bs = Basler Botanische Gesellschaft, Basel, Switzerland
Bt = Butler University, Indianapolis, Indiana
Bu = W. M. Buswell Herbarium, University of Miami, Coral Gables, Florida
Bv = Bureau of Plant Industry Station, Beltsville, Maryland
By = Brooklyn College, Brooklyn, New York City
Bz = Herbarium Bogoriense, Buitenzorg, Java, Indonesia
C = Columbia University Herbarium, New York Botanical Garden, New York City
Ca = University of California, Berkeley, California
Cb = Delessert Herbarium, Conservatoire et Jardin Botaniques, Geneva, Switzerland
Cc = Colorado College, Colorado Springs, Colorado
Cd = Museo de Córdoba, Córdoba, Argentina
Ch = Carey Herbarium, Royal Botanic Gardens, Kew, England
Ci = Escuela Superior Agricultura Tropical, Cali, Colombia
Cl = Royal Botanic Gardens, Calcutta, India
Cm = Carnegie Museum, Pittsburgh, Pennsylvania
Cn = University of Cincinnati, Cincinnati, Ohio
Co = North Appalachian Experimental Watershed, Coshocton, Ohio
Cp = Universitetets Botaniske Museum, Copenhagen, Denmark
Cr = J. Carabia Herbarium, Sansalito, California
Cs = Department of Biology, Agricultural and Mechanical College of Texas, College Station, Texas
Ct = Bolus Herbarium, University of Capetown, Capetown, South Africa
Cu = Cambridge University, Cambridge, England
Cz = Canal Zone Biological Area, Barro Colorado Island, Canal Zone

D = Academy of Natural Sciences, Philadelphia, Pennsylvania
Da = United States Department of Agriculture, Washington, D. C.
Dc = De Candolle Herbarium, Conservatoire et Jardin Botaniques, Geneva, Switzerland
Dd = Botanic Gardens, Dehra Dun, Uttar Pradesh, India
De = Delzie Demaree Herbarium, Monticello, Arkansas
Dg = Otto Degener Herbarium, Waialua, Hawaii
Di = Carthage College, Carthage, Illinois
Dm = C. C. Deam Herbarium, Bluffton, Indiana
Dp = De Pauw University, Greencastle, Indiana
Dr = Botanisches Institut, Dresden, Germany
Dt = Jesup Herbarium, Dartmouth College, Hanover, New Hampshire
Du = Dudley Herbarium, Stanford University, Stanford, California
Dv = Botany Department, College of Agriculture, Davis, California
E = Missouri Botanical Garden, Saint Louis, Missouri
Ea = Earlham College, Earlham, Indiana
Ec = Universidad Nacional de Loja, Loja, Ecuador
Ed = Royal Botanic Garden, Edinburgh, Scotland
El = José Eugenio Leite Herbarium, Novo Friburgo, Rio de Janeiro, Brazil
En = J. Ewan Herbarium, New Orleans, Louisiana
Er = Palynologiska Laboratoriet, Bromma, Sweden
Es = Estacion Experimental Agronomica, Santiago de las Vegas, Havana, Cuba
Ew = Erik Wall Herbarium, Stockholm, Sweden
F = Chicago Natural History Museum, Chicago, Illinois
Fc = Colorado Agricultural and Mechanical College, Fort Collins, Colorado
Fg = Arizona State College, Flagstaff, Arizona
Fj = Fred B. Jones Herbarium, Corpus Christi, Texas
Fl = University of Florida, Gainesville, Florida
Fn = Facultad Nacional de Agronomia, Universidad Nacional, Medellin, Colombia
Fo = Instituto Botanico della Universita, Florence, Italy
Fs = Forrest Shreve Herbarium, University of Arizona, Tucson, Arizona
Fx = Lauretta E. Fox Herbarium, Natchitoches, Louisiana
Fy = University of Arkansas, Fayetteville, Arkansas
G = Gray Herbarium, Harvard University, Cambridge, Massachusetts
Ga = Georgia Agricultural Experiment Station, Experiment, Georgia
Ge = H. S. Gentry Herbarium, Tucson, Arizona
Gg = California Academy of Sciences, San Francisco, California
Gl = Museu Goeldi, Belém, Pará, Brazil
Gm = Wallich Herbarium, Royal Botanic Gardens, Kew, England
Go = Botaniska Trädgard, Göteborg, Sweden
Gp = Ontario Agricultural College, Guelph, Ontario, Canada
Gt = Botanische Anstalten, Göttingen, Germany
Gu = University of Georgia, Athens, Georgia
H = Duke University, Durham, North Carolina
Ha = Colegio de la Salle, Vedado, Havana, Cuba
Hb = H. Bassler Herbarium, New York Botanical Garden, New York City

He = W. G. Herter Herbarium, Montevideo, Uruguay
Hi = University of North Carolina, Chapel Hill, North Carolina
Hk = University of Helsinki, Helsinki, Finland
Hn = Herbario Nacional Colombiano, Instituto Ciencias Naturales, Bogotá, Colombia
Hp = H. Hapeman Herbarium, Minden, Nebraska
Hq = Instituto Botanico Dr. Julio Henriques, Coimbra, Portugal
Hr = H. Hürlimann Herbarium, CIBA, Basel, Switzerland
Hs = Crispus Attucks High School, Indianapolis, Indiana
Hu = Sam Houston State Teachers College, Huntsville, Texas
Hv = Academia de Ciencias, Havana, Cuba
Hw = Howard University, Washington, D. C.
I = Langlois Herbarium, Catholic University of America, Washington, D. C.
Ib = Instituto de Botanica e Agricola del I. N. T. A., Buenos Aires, Argentina
Id = University of Idaho, Southern Branch, Pocatello, Idaho
Ih = Instituto de Historia Natural, Curitiba, Paraná, Brazil
Ij = Science Museum, Institue of Jamaica, Kingston, Jamaica
Il = Illinois State Museum, Springfield, Illinois
In = Indiana University, Bloomington, Indiana
Io = Iowa State College, Ames, Iowa
Ip = Escuela Nacional de Ciencias Biologicas, Instituto Politecnico Nacional, Mexico City, Mexico
It = Cornell University, Ithaca, New York
J = Brooklyn Botanic Garden, Brooklyn, New York City
Ja = Museu Nacional, Rio de Janeiro, Guanabara, Brazil
Jc = J. Cuatrecasas Herbarium, Bensenville, Illinois
Je = William Jewell College, Liberty, Missouri
Jn = Aage Bohus-Jensen Herbarium, Lyngbye, Denmark
Jr = Hebrew University, Jerusalem, Israel
Jz = J. de J. Jiminéz Herbarium, Santiago de los Caballeros, Dominican Republic
K = Royal Botanic Gardens, Kew, England
Ka = Kansas State College, Manhattan, Kansas
Ke = Kern Herbarium, Pennsylvania State College, State College, Pennsylvania
Kg = Department of Agriculture, Kagoshima University, Kagoshima, Japan
Ki = E. P. Killip Herbarium, University of Rochester, Rochester, New York
Ko = Botanisches Institut, Universität Köln, Köln, Germany
Kr = B. A. Krukoff Herbarium, Smithtown, New York
Ku = Eberhard Kausel Herbarium, Santiago, Chile
Ky = University of Kentucky, Lexington, Kentucky
L = Jardin Botanique Principal, Leningrad, U. S. S. R.
La = University of California at L. A., Los Angeles, California
Lb = University of Missouri, Columbia, Missouri
Ld = C. L. Lundell Herbarium, Renner, Texas
Le = Rijksherbarium, Leiden, Netherlands
Lg = Fritz Lemperg Herbarium, Hatzendorf, Steiermark, Austria
Lh = Laboratory Herbarium, Department of Botany, Barnard College,

New York City
Li = Colegio Salesiano, Lima, Peru
Ll = Lloyd Library, Cincinnati, Ohio
Lm = Los Angeles County Museum, Los Angeles, California
Lo = Gaulterio Looser Herbarium, Santiago, Chile
Ls = Linnean Herbarium, Linnean Society, London, England
Lu = Botanisk Museum, University of Lund, Lund, Sweden
Lw = University of Kansas, Lawrence, Kansas
Lz = A. Lutz Herbarium, Universidade do Brasil, Rio de Janeiro, Guanabara, Brazil
M = Meisner Herbarium, New York Botanical Garden, New York City
Ma = Forest Department of Malaya, Kepong, Selangor, Malaya
Mb = Melbourne Botanic Garden, Melbourne, Victoria, Australia
Mc = J. B. McFarlin Herbarium, Sebring, Florida
Md = University of Maryland, College Park, Maryland
Me = Instituto de Biologia, Universidad Nacional de México, Mexico City, Mexico
Mf = Maharan's College, Bangalore, India
Mg = Montreal Botanical Garden, Montreal, Quebec, Canada
Mh = Matuda Herbarium, Mexico City, Mexico
Mi = University of Michigan, Ann Arbor, Michigan
Mk = F. C. MacKeever Herbarium, Mount Vernon, New York
Ml = Instituto Miguel Lillo, Tucumán, Argentina
Mm = McGill University, Montreal, Quebec, Canada
Mn = University of Montana, Missoula, Montana
Mo = Morris Arboretum, Philadelphia, Pennsylvania
Mp = Museo Paranaënse, Curitiba, Paraná, Brazil
Mr = Morehead State College, Morehead, Kentucky
Ms = University of Massachusetts, Amherst, Massachusetts
Mt = Mary Thais Herbarium, St. Mary's High School, Perth Amboy, New Jersey
Mu = Botanisches Museum, Munich, Germany
Mv = Marie-Victorin Herbarium, Montreal Botanical Garden, Montreal, Quebec, Canada
N = Britton Herbarium, New York Botanical Garden, New York City
Na = Natal Government Herbarium, Durban, Natal, South Africa
Nb = Stephen F. Austin State College, Nacogdoches, Texas
Nc = State Normal College, Natchitoches, Louisiana
Nd = Notre Dame University, Notre Dame, Indiana
Ng = Department of Forests, Lae, New Guinea
Nj = Douglas College, New Brunswick, New Jersey
Nm = Newark Museum, Newark, New Jersey
No = North Carolina State College, Raleigh, North Carolina
Nt = North Texas State Teachers College, Denton, Texas
O = University of Tennessee, Knoxville, Tennessee
Oa = Oakes Ames Economic Herbarium, Botanical Museum, Harvard University, Cambridge, Massachusetts
Ob = Oberlin College, Oberlin, Ohio
Og = Percy Olrog Herbarium, Stockholm, Sweden
Ok = University of Oklahoma, Norman, Oklahoma
Ol = Universitetets Botaniske Museum, Oslo, Norway
Om = Omer E. Sperry Herbarium, Alpine, Texas

Or = Oregon State College, Corvallis, Oregon
Os = Osborn Botanical Laboratory, Yale University, New Haven, Connecticut
Ot = National Herbarium of Canada, Ottawa, Ontario, Canada
Ox = Oxford University, Oxford, England
P = Muséum National d'Histoire Naturelle, Paris, France
Pa = College of Pharmacy Herbarium, New York Botanical Garden, New York City
Pb = R. Probst Herbarium, Langendorf, Switzerland
Pc = Philip Cheitman Herbarium, New York City
Pe = Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru
Pf = Centro de Pesquisas Florestais e Conservacão de Natureza, Tijuca, Rio de Janeiro, Brazil
Ph = Philippine Bureau of Science, Manila, Philippine Islands
Pi = Polytechnic Institute of Puerto Rico, San Germán, Puerto Rico
Pl = State College of Washington, Pullman, Washington
Pm = Pharma Herbarium, CIBA, Basel, Switzerland
Pn = Parque Nacional de Serra dos Orgãos, Terezopolis, Rio de Janeiro, Brazil
Po = Pomona College, Claremont, California
Pr = Princeton University Herbarium, New York Botanical Garden, New York City
Pu = Purdue University, Lafayette, Indiana
Q = Jardin Botanico, Madrid, Spain
Qi = W. C. Werner Herbarium, Painesville, Ohio
Qu = North Queensland Herbarium, North Queensland Naturalists Club, Cairns, Queensland, Australia
R = Trinidad & Tobago Botanical Garden, Port-of-Spain, Trinidad
Ra = Museo Nacional de Historia Natural, Buenos Aires, Argentina
Rb = Colegio Anchieta, Porto Alegre, Santa Catarina, Brazil
Rd = Herbario Barbosa Rodrigues, Itajai, Santa Catarina, Brazil
Re = R. E. Schultes Herbarium, Cambridge, Massachusetts
Rf = Texas Research Foundation, Renner, Texas
Rg = J. T. Roig Herbarium, Estacion Experimental Agronomica, Santiago de las Vegas, Havana, Cuba
Rh = Government Herbarium, Causeway, Salisbury, Rhodesia
Rl = Herbario Ruiz Leal, Godoy Cruz, Mendoza, Argentina
Ro = Santa Rosa Junior College, Santa Rosa, California
Rr = Robert Runyon Herbarium, Brownsville, Texas
Rs = Rancho Santa Ana Botanic Garden, Claremont, California
Ru = Rutgers University, New Brunswick, New Jersey
S = Naturhistoriska Riksmuseum, Stockholm, Sweden
Sa = Henry R. Carter Memorial Laboratory, Savannah, Georgia
Sc = Colegio Notra Señora de la Caridad, Santiago, Cuba
Sd = San Diego Society of Natural History, San Diego, California
Se = University of Washington, Seattle, Washington
Sf = Servico Florestal do Estado, São Paulo, Brazil
Sg = Museo Nacional de Historia Natural, Santiago, Chile
Sh = Blythe Sherwood Herbarium, Pawling, New York
Si = Instituto Darwinion, San Isidro, Argentina
Sj = University of Puerto Rico, San Juan, Puerto Rico

Sk = University of Saskatchewan, Saskatoon, Saskatchewan, Canada
Sm = Southern Methodist University, Dallas, Texas
Sp = Jardim Botanico, São Paulo, Brazil
Sq = E. R. Squibb and Sons, New York City
Sr = Sul Ross Teachers College, Alpine, Texas
Ss = Science Service, Department of Agriculture, Ottawa, Ontario, Canada
St = Oklahoma State University, Stillwater, Oklahoma
Sw = J. Otis Swift Herbarium, New York City
Sz = A. G. Schulz Herbarium, Colonia Benítez, Chaco, Argentina
T = Torrey Herbarium, New York Botanical Garden, New York City
Tc = Torrey Botanical Club Herbarium, New York Botanical Garden, New York City
Th = Thunberg Herbarium, Botaniska Institutionen, Uppsala, Sweden
Tj = University of Santo Domingo, Santo Domingo, Dominican Republic
Tl = Tulane University, New Orleans, Louisiana
Tm = Transvaal Museum, Pretoria, Transvaal, South Africa
To = United States Field Station, Sacaton, Arizona
Tr = S. M. Tracy Herbarium, Texas Agricultural Experiment Station, College Station, Texas
Tu = University of Arizona, Tucson, Arizona
U = Jenman Herbarium, Botanic Garden, Georgetown, British Guiana
Ua = Utah State Agricultural College, Logan, Utah
Ug = Museo de Historia Natural, Montevideo, Uruguay
Ul = Centro de Botanica, Junta de Investigações do Ultramar, Lisbon, Portugal
Um = University of Montreal, Montreal, Quebec, Canada
Up = University of Pennsylvania, Philadelphia, Pennsylvania
Ur = University of Illinois, Urbana, Illinois
Us = Botaniska Institutiones, Uppsala, Sweden
Ut = Botanisch Museum en Herbarium, Utrecht, Netherlands
V = Naturhistorisches Museum, Vienna, Austria
Va = Vanderbilt University, Nashville, Tennessee
Ve = Museo Comercial de Venezuela, Caracas, Venezuela
Vi = Marie-Victorin Herbarium, University of Montreal, Montreal, Quebec, Canada
Vl = Facultad de Agronomia del Valle, Valle del Cauca, Colombia
Vt = University of Vermont, Burlington, Vermont
Vu = Botanisches Institut der Universität, Vienna, Austria
Vx = Växtbiologiska Institutionen, Uppsala Universitets, Uppsala, Sweden
W = United States National Museum, Smithsonian Institution, Washington, D. C.
Wb = Wilson Brown Herbarium, Jesuit Tertianship, Auriesville, New York
We = West Virginia University, Morgantown, West Virginia
Wh = Faculdade de Farmacia e Odontologia, Universidad de São Paulo, São Paulo, Brazil
Wi = Witte Memorial Museum, San Antonio, Texas
Wl = William Lucian Herbarium, Waterbury, Connecticut
Wp = University of Manitoba, Winnipeg, Manitoba, Canada

Ws = University of Wisconsin, Madison, Wisconsin
Ww = Rob and Bessie Welder Wildlife Foundation, Corpus Christi, Texas
Wx = Max Gordon Herbarium, New York City
X = Herbier Boissier, Conservatoire et Jardin Botaniques, Geneva, Switzerland
Xa = Blatter Herbarium, Saint Xavier's College, Bombay, India
Y = Yale School of Forestry, New Haven, Connecticut
Yu = T. G. Yuncker Herbarium, Greencastle, Indiana
Z = H. N. Moldenke Herbarium, Plainfield, New Jersey

CALLICARPA L., Act. Soc. Reg. Sci. Ups. 80 (1741); Sp. Pl., ed. 1, 1: 111 (1753); Gen. Pl., ed. 5, 50. 1754.

Additional & emended synonymy: Tomex L., Nov. Pl. Gen. Diss. Dassow 5. 1747. Illa Herm. ex L., Nov. Pl. Gen. Diss. Dassow 5. 1747. Spondylococcos Mitch., Act. Phys.-med. Acad. Caes. Leopold.-Carol. Nat. Cur. 8 (app.): 218. 1748. Johnsonia T. Dale ex P. Mill., Gard. Dict., ed. 6, app. 75 (1752), ed. 7. 1759. Sphondylococcos Mitch. apud L., Sp. Pl., ed. 1, 1: 111, in syn. 1753. Burcardia Heist. ex Duham., Trait. Arb. & Arbust. 1: 111—112, pl. 44. 1755. Spondylococeus Mitch. apud P. Mill., Gard. Dict., ed. 7, in syn. 1759. Burchardia Duham. apud L., Sp. Pl., ed. 2, 1: 161, in syn. 1762 [not Burchardia R. Br., 1810]. Johnsonia Mill. apud L., Sp. Pl., ed. 2, 1: 161, in syn. 1762. Tomox L. apud Adans., Fam. Pl. 2: 446, in syn. 1763. Illa Adans., Fam. Pl. 2: 446. 1763. Spondylococus Mitch. apud P. Mill., Gard. Dict., ed. 8, in syn. 1768. Callacarpa P. Mill., Gard. Dict., ed. 8, in syn. 1768. Burchardia Heist. apud Reichard, Linn. Gen. Pl., ed. 8, 56, in syn. 1778. Burcardia Duham. apud Lam., Encycl. Méth. Bot. 1: 563, in syn. 1783. Porphyra Lour., Fl. Cochinch., ed. 1, 1: 69. 1790 [not Porphyra C. Agardh, 1822]. Spondylococcus Mitch. apud Reichenb. in Mössler, Handb. Gewächsk., ed. 1, 1: xxxvi. 1827. Amictonis Raf., Sylv. Tellur. 161. 1838. Sphondylococcum Mitch. apud Endl., Gen. Pl. 637, in syn. 1838. Johnsonia Catesby apud Endl., Gen. Pl. 637, in syn. 1838. Callicarpus L. apud Hassk., Cat. Pl. Hort. Bot. Bogor. 136. 1844. Sphondylococcus Mitch. apud Walp., Repert. 4: 127, in syn. 1845. Callicarpus Hassk. apud Miq., Fl. Ind. Bat. 2: 884, in syn. 1857. Spondylococca Mitch. apud Benth. in Benth. & Hook. f., Gen. Pl. 2 (2): 1150, in syn. 1876. Calycarpa L. apud Featherman, Rep. Bot. Surv. South Cent. La. 99. 1891. Burchardia (Heist.) Duham. ex Jacks. in Hook. f. & Jacks., Ind. Kew, 1: 386, in syn. 1893. Tomea L. apud Jacks. in Hook. f. & Jacks., Ind. Kew. 1: 386, in syn. 1893. Callicapra Rama Rao, Flower. Pl. Travancore 314, sphalm. 1914. Burcardia (Heist.) Duham. ex Bakh., Bull. Jard. Bot. Buitenz., ser. 3, 3: 9, in syn. 1921. Burcardia Mill. ex Moldenke in Fedde, Repert. Spec. Nov.

39: 291, in syn. 1936. Spondylococcum Mitch. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Calicarpa L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Calicocarpa L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Callicarpha L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Callocarpa L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Callycarpa L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 291, in syn. 1936. Catlicarpa Schau. apud Moldenke in Fedde, Repert. Spec. Nov. 42: 242, sphalm. 1937. Caliocarpa L. ex Moldenke, Prelim. Alph. List Invalid Names 9, in syn. 1940. Callicarpia L. ex Moldenke, Prelim. Alph. List Invalid Names 13, in syn. 1940. Porphyria Lour. ex Moldenke, Prelim. Alph. List Invalid Names 37, in syn. 1940. Spondylococca L. ex Moldenke, Prelim. Alph. List Invalid Names 40, in syn. 1940. Calicarpus L. ex Moldenke, Suppl. List Invalid Names 1, in syn. 1941. Calleocarpa L. ex Moldenke, Suppl. List Invalid Names 1, in syn. 1941.

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12: 509 (1966), and 13: 328, 329, 332, & 344. 1966; Moldenke, Résumé Suppl. 13: 5 & 6. 1966; Anon., Biol. Abstr. 47 (5): S.23 & S.143. 1966; G. Grimm, N. Y. Herald Trib., sect. 2, 20, February 6. 1966; G. Taylor, Ind. Kew. Suppl. 13: 21. 1966; Balakrishnan, Biolog. Abstr. 47: 4615. 1966; J. A. Clark, Card Ind. Gen. Sp. Pl. n.d.

This is a genus of about 188 species and subspecific taxa and hybrids, widely distributed in subtropical and tropical Asia and Oceanica, to a lesser extent in the Americas, a few species extending into the temperate portions of Asia and North America, south to Australia and west to the Seychelles and Madagascar; many are cultivated for their handsome fruit. The type species is C. americana L. The generic name is derived from the Greek words, καλλος, beauty, and καρπος, fruit -- the first letter of the first Greek word is given erroneously as "χ" in my earlier work on this genus through a printer's typographic error which I was not permitted to correct.

Bentham & Mueller (1870) refer to "a few African and American species", but I know of no species of this genus native to continental Africa. They say that "The genus is most readily distinguished from Premna by the inflorescence, and by the flowers more regular with isomerous stamens. The differences in the fruit may not be constant."

It is of interest to note how authors in the past have differed in their estimates of the size of this genus. Bentham (1876) recognized 30 species, a figure repeated by Hemsley (1881--1882) and by King & Gamble (1908). Briquet (1895) and Schneider (1911) modified this estimate to "Uber 30". Britton (1918) gives the number as "about 35". Nakai (1923), Wisler (1942--1943), and Li (1963) say "about 40 species". Britton & Borwn (1913) increase it to "about 45", while P'ei (1932) makes it "about 80 species". In my 1942 work I give the number as "about 150 species and varieties". Santamour (1965) says that the genus "contains between 40 and 142 species, depending on the authority consulted".

Although Loureiro proposed the name Porphyra in 1790 and Agardh did not propose his algal genus of the same name until 1822, the latter has unfortunately been conserved and is valid for the algal genus under the present edition of the International Rules of Botanic Nomenclature!

Referring to Hasskarl's "correction" of the spelling of the name Callicarpa to "Callicarpus", it is pointed out by Sprague (1950) that under these same present rules the name must remain feminine as originally proposed by Linnaeus.

It should be noted here that Illa Herm., included in the generic synonymy above, being a mononomial, is actually also a part of the synonymy of the species Callicarpa tomentosa (L.) Murr. The Burchardia of Robert Brown, referred to above, is a genus in the Liliaceae.

Geunsia Blume is included in the synonymy of Callicarpa by Schauer (1847), Miquel (1857), Lemaire & Verschaffelt (1859), and

Bakhuizen van den Brink (1921), but I agree with Dr. Lam in regarding it as a distinct and valid genus, differing in having its gynoecium usually 5- (rarely 4-) carpellary, its stamens usually 5 in number, and its leaves usually anisophyllous. Aganon Raf. is included in the synonymy of Callicarpa by Jackson (1893) and by Bakhuizen van den Brink (1921), as well as by myself in my 1936 work on the genus, but, according to Merrill's monumental commentary on Loureiro's plants (1935), is actually not verbenaceous.

Nakai (1923) includes Anonymos baccifera verticillata, folia molli et incano, ex America etc. Pluk. in the generic synonymy of Callicarpa, but this pre-linnean polynomial can certainly not by any stretch of the imagination be regarded as a generic name. It belongs rightfully in the synonymy only of Callicarpa americana L.

The genus Callicarpa is placed in the family Labiatae, Section Verbeneae, by Reichenbach (1827, 1828, 1833), with "Spondylococcus Mitch. non W." as a synonym. This same author regarded Porphyra Lour. as a valid and distinct genus. Dahlgren (1938) also places Callicarpa in the Labiatae.

An additional German common name for the genus as a whole, not recorded by me in my previous work, is "Schönbeere", while in English the members of the group are called "beautyberry", "beautyberries", or "beauty-berries". DeLaszlo & Henshaw (1954) quote H. A. Marshall (1922) regarding a species of this genus called "argerarger" in the Torres Straits, whose young leaves, well chewed by a woman until her body its saturated with the swallowed juice, will cause permanent sterility. Jones (1795) records the vernacular name "máshandarí".

The gynoecium morphology of the genus is discussed by Junell (1934). Roxburgh (1820) refers to the fruit as a 4-seeded "berry", with the "Embryo erect, and furnished with a perisperm". Actually, the fruit is a drupe. Razi (1950) affirms that the seed dissemination is endozoic. Rehder (1927) describes the group as "Ornamental shrubs chiefly grown for the attractive fls. and handsome frs. late in autumn; rather tender, but even if killed back, the young shoots usually flower and fruit the same season."

In the Linnean Herbarium there are three specimens preserved under genus 136, Callicarpa. The first of these is labeled "1. americana" in Linnaeus' own handwriting, plus a label of Gronovius and the notation "vera". The second specimen is labeled "2. tomentosa", with the added notation "cana ?" by J. E. Smith [according to B. D. Jackson]. The specimen is neither C. tomentosa (L.) Murr. nor C. candicans (Burm. f.) Hochr. [formerly known as C. cana L.], but is typical C. nudiflora Hook. & Arn. The third specimen is unidentified, labeled merely "3" and "Ind. or.", and is plainly C. candicans.

Cain (1944) reminds us that Callicarpa is one of the considerable number of genera listed by Asa Gray as being represented in Japan and vicinity [eastern Asia] and in eastern North America, but not in Europe or western North America.

Westcott (1950) records the fungi Meliola cookeana (black mildew) from this genus in Florida and Louisiana and Cercospora callicarpae (leaf-spot) from South Carolina to Texas. It is most probable that she refers here to C. americana L. as the host. Arthur & Cummins (1936) record the fungus Uredo callicarpae Petch from an unidentified species of Callicarpa represented by Clemens 5029.

An unidentified species of this genus from the Philippines is illustrated by Ettingshausen (1861). The Frutex ceramicus of Rumphius (1743), plate 60, is an as yet unidentified species of Callicarpa. Merrill (1917) says "This was described from material originating in Ceram and Banda and is undoubtedly a species of Callicarpa. Hasskarl, Neue Schlüssel (1866) 84, suggested that it might be Grewia inaequalis Blume, but the drawing certainly represents no Grewia, while the description seems to conform to Callicarpa. Field work is necessary in Ceram and Banda before the position of Frutex ceramicus can be definitely settled. Hasskarl .....also suggests that Perlarius alter silvestris may be a species of Callicarpa, but the description is too incomplete to warrant a definite reference of this to any particular genus." I may mention here that, as of the present writing, I know only C. longifolia Lam. from Ceram and C. pedunculata from Banda.

The Matheus 1210, distributed in some herbaria as a Callicarpa, is actually a species of Siparuna in the Monimiaceae; Clemens & Clemens 959 is Buddleia racemosa Torr. in the Loganiaceae. Wissmann 443, in the Vienna herbarium, is determined as Callicarpa on its label, but consists of only two leaves which I do not think are even verbenaceous; similarly, the MacGregor s.n. from East Island in the Louisidades is certainly not verbenaceous; Mocquerys 910 is Aegiphila martinicensis Jacq., while 1018 is A. laeta H.B.K. A sheet from Australia labeled "Burchardia umbellata R. Br." is in the Callicarpa folder in the herbarium of McGill University, but is not verbenaceous — it represents a valid genus and species in the Liliaceae.

The Uphof (1930) reference in the bibliography above is sometimes erroneously dated "1935--1936" in literature; the Lam & Meeuse (1942) reference is sometimes dated "1945" or "1946" in error; and the Hatusima (1949) reference is sometimes cited "23: 81" in error. Coulter's work on the phanerogams of western Texas (1892) is often misdated "1894", but the section on Gamopetalae was actually issued in 1892. Siebold, Jaarboek van de Koninklijke Nederlandsche Maatschappij tot Aarmoediging van den Tuinbouw 1845: 71, pl. 5 & 6 is often cited in literature as "Ann. Hort. Pays-Bas pl. 5 & 6", an alternate title. The Buchoz (1783) reference is sometimes given as "pl. 43", but the plate in question is plainly labelled "xxxvi" in the New York Botanical Garden library copy. The reference "Journ. Malay. Br. Roy. Asiat. Soc. 2: 615. 1923" is

sometimes cited, but there is no such page number in the stated volume; the same is true of the "Journ. Roy. Asiat. Soc. Bengal 73 (3): 1012 & 1018. 1909".

Specimens from the herbaria of the University of California (Ca), Missouri Botanical Garden (E), Chicago Natural History Museum (F), and the United States National Museum (W), cited in my 1936 work on this genus without herbarium sheet numbers, are repeated in the present work with the proper sheet numbers added.

An alphabetic list of names applying to taxa excluded from the genus Callicarpa:

Callicarpa acuminatissima Teijsm. & Binn. = Geunsia acuminatissima (Teijsm. & Binn) H. J. Lam.

Callicarpa affinis Elm. = Geunsia farinosa Blume

Callicarpa apoënsis Elm. = Geunsia apoënsis (Elm.) Moldenke

Callicarpa cavaleriei Lévl. = Ilex sp., Ilicaceae

Callicarpa cinerea A. Rich. = Petitia domingensis Jacq.

Callicarpa cordifolia Ruíz & Pav. = Aegiphila cordifolia (Ruíz & Pav.) Moldenke

Callicarpa cumingiana Schau. = Geunsia cumingiana (Schau.) Rolfe

Callicarpa dentata Pav. = Cornutia grandifolia (Schlecht. & Cham.) Schau.

Callicarpa dentata Sessé & Moc. = Cornutia grandifolia (Schlecht. & Cham.) Schau.

Callicarpa discolor Willd. = Aegiphila integrifolia (Jacq.) Jacks.

Callicarpa epiphytica Elm. = Geunsia flavida (Elm.) H. J. Lam

Callicarpa esquirolii Lévl. [Esquirol 72] = Dichroa febrifuga Lour., Hydrangeaceae

Callicarpa esquirolii Lévl. [Esquirol 754] = Caryopteris paniculata C. B. Clarke

Callicarpa eucaudata Merr. & Quisumb. = Geunsia cumingiana (Schau.) Rolfe

Callicarpa flavida Elm. = Geunsia flavida (Elm.) H. J. Lam

Callicarpa globiflora Ruíz & Pav. = Aegiphila integrifolia (Jacq.) Jacks.

Callicarpa hexandra Teijsm. & Binn. = Geunsia hexandra (Teijsm. & Binn.) Koord.

Callicarpa hexandria Teijsm. & Binn. = Geunsia hexandra (Teijsm. & Binn.) Koord.

Callicarpa integrifolia Jacq. = Aegiphila integrifolia (Jacq.) Jacks.

Callicarpa lanata Lam. = Premna tomentosa Willd.

Callicarpa leveilleana Fedde = Dichroa febrifuga Lour., Hydrangeaceae

Callicarpa martini Lévl. = Caryopteris paniculata C. B. Clarke

Callicarpa martinii Lévl. = Caryopteris paniculata C. B. Clarke

Callicarpa mekongensis W. W. Sm. = Premna mekongensis W. W. Sm.

Callicarpa paloensis Elm. = Geunsia paloënsis (Elm.) H. J. Lam
Callicarpa paniculata (Kurz) Clarke = Caryopteris paniculata C. B. Clarke
Callicarpa paniculata Lam. = Chilianthus arboreus (L. f.) Benth., Loganiaceae
Callicarpa pentandra Roxb. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra f. farinosa (Blume) Bakh. = Geunsia farinosa Blume
Callicarpa pentandra f. floccosa Bakh. = Geunsia hexandra (Teijsm. & Binn.) Koord.
Callicarpa pentandra f. glabra Bakh. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra f. glabrescens Bakh. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra f. pubescens Bakh. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra var. cumingiana (Schau.) Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa pentandra var. cumingiana f. dentata Bakh. = Geunsia cumingiana var. dentata (Bakh.) Moldenke
Callicarpa pentandra var. cumingiana f. genuina Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa pentandra var. cumingiana f. pentamera (H. J. Lam) Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa pentandra var. cumingiana f. typica Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa pentandra var. paloensis (Elm.) Bakh. = Geunsia paloënsis (Elm.) H. J. Lam
Callicarpa pentandra var. paloensis f. apoensis Bakh. = Geunsia apoënsis (Elm.) Moldenke
Callicarpa pentandra var. paloensis f. apoensis (Elm.) Bakh. = Geunsia apoënsis (Elm.) Moldenke
Callicarpa pentandra var. paloensis f. celebica (Koord.) Bakh. = Geunsia paloënsis var. celebica (Koord.) Moldenke
Callicarpa pentandra var. paloensis f. furfuracea Bakh. = Geunsia furfuracea (Bakh.) Moldenke
Callicarpa pentandra var. paloensis f. genuina Bakh. = Geunsia paloënsis (Elm.) H. J. Lam
Callicarpa pentandra var. paloensis f. typica Bakh. = Geunsia paloënsis (Elm.) H. J. Lam
Callicarpa pentandra var. pubescens Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa pentandra var. repleta f. celebica (Koord.) Bakh. = Geunsia paloënsis var. celebica (Koord.) Moldenke
Callicarpa pentandra var. repleta f. furfuracea Bakh. = Geunsia furfuracea (Bakh.) Moldenke

Callicarpa pentandra var. typica (Schau.) Bakh. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra var. typica f. farinosa (Blume) Bakh. = Geunsia farinosa Blume
Callicarpa pentandra var. typica f. flavida (Elm.) Bakh. = Geunsia flavida (Elm.) H. J. Lam
Callicarpa pentandra var. typica f. genuina Bakh. = Geunsia pentandra (Roxb.) Merr.
Callicarpa pentandra var. typica f. hexandra Bakh. = Geunsia hexandra (Teijsm. & Binn.) Koord.
Callicarpa pentandra var. typica f. hexandra (Teijsm. & Binn.) Bakh. = Geunsia hexandra (Teijsm. & Binn.) Koord.
Callicarpa pentandra var. typica f. pubescens Bakh. = Geunsia cumingiana (Schau.) Rolfe
Callicarpa prismatica Robledo = Bouchea prismatica (L.) Kuntze
Callicarpa reticulata Poepp. = Petitia domingensis Jacq.
Callicarpa sorsogonensis Elm. = Geunsia paloënsis (Elm.) H. J. Lam
Callicarpa spinosa Harshberger = Aralia spinosa L., Araliaceae
Callicarpa subglandulosa Elm. = Geunsia pentandra (Roxb.) Merr.
Callicarpa triloba Lour. = Cissus triloba (Lour.) Merr., Vitaceae
Callicarpa umbellata Lour. = ? Premna sp.
Callicarpa vastifolia Diels = Viburnum rhytidophyllum Hemsl., Caprifoliaceae
Callicarpa velutina Presl = Siparuna velutina (Presl) Moldenke, Monimiaceae

CALLICARPA ACULEOLATA Schau. in A. DC., Prodr. 11: 642. 1847.

Emended synonymy: Callicarpa verticillata Hort. ex Moldenke in Fedde, Repert. Spec. Nov. 40: 79, in syn. 1936.

Bibliography: Schau. in A. DC., Prodr. 11: 642. 1847; Griseb., Abhandl. König. Gesell. Wissen. Götting. 7: 256. 1857; Jacks. in Hook. f. & Jacks., Ind. Kew. 1: 386. 1893; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 166. 1895; Urb., Symb. Antil. 7: 356. 1911; Moldenke in Fedde, Repert. Spec. Nov. 39: 299 (1936) and 40: 53, 73, 75, 78--82, 120, & 121. 1936; Moldenke, Geogr. Distrib. Avicenn. 7. 1939; Moldenke, Prelim. Alph. List Invalid Names 13. 1940; Moldenke, Known Geogr. Distrib. Verbenac., ed. 1, 26 & 86. 1942; Moldenke, Alph. List Invalid Names 11. 1942; Moldenke, Alph. List Cit. 1: 39 (1946), 2: 347, 421, & 432 (1948), and 3: 695. 1949; Moldenke, Known Geogr. Distrib. Verbenac., ed. 2, 47 & 176. 1949; Moldenke, Résumé 56, 247, & 443. 1959.

In all, 10 herbarium specimens, including type material of all the names involved, and 7 mounted photographs have been examined by me.

Additional citations: HISPANIOLA: Dominican Republic: Bertero 349 [Macbride photos 33931] (Dc--type, E--119244--isotype, F--969770--photo of type, Kr--photo of type, Mu--941--isotype, N--

photo of type, N--photo of type, Z--photo of type); Lavastre 1718 (N, Z).

CALLICARPA ACUMINATA H.B.K., Nov. Gen. & Sp. Pl. 2: 252. 1818 [not C. acuminata Roxb., 1814, hyponym].

Additional & emended synonymy: Callicarpa subintegerrima H.B.K., Nov. Gen. & Sp. Pl. 2: 252--253. 1818. Callicarpa acuminata Humb. & Bonpl. apud Steud., Nom. Bot., ed. 1, 137. 1821. Callicarpa subintegerrima Humb. & Bonpl. apud Steud., Nom. Bot., ed. 1, 137. 1821. Callicarpa acuminata Humb. apud Spreng. in L., Syst. Veg., ed. 16, 1: 420. 1825. Callicarpa subintegerrima Humb. apud Spreng. in L., Syst. Veg., ed. 16, 1: 420. 1825. Callicarpa bonplandiana Schult., Mant. 3: 50--51. 1827. Callicarpa acuminata Humb. & Kunth apud D. Dietr., Syn. Pl. 1: 428. 1839. Callicarpa mollis Req. ex D. Dietr., Syn. Pl. 1: 428. 1839 [not C. mollis Koord., in herb., nor Matsumura, 1922, nor Shirasawa, 1949, nor Sieb. & Zucc., 1844]. Callicarpa subintegerrima Humb. & Kunth apud D. Dietr., Syn. Pl. 1: 428. 1839. Callicarpa mollis Willd. ex Steud., Nom. Bot., ed. 2, 257, in syn. 1840. Callicarpus acuminata Humb. apud Hassk., Cat. Pl. Hort. Bot. Bogor. Alt. 136. 1844. Callicarpa acuminata Kunth apud Schau. in A. DC., Prodr. 11: 644. 1847. Callicarpa schlimii Turcz., Bull. Soc. Imp. Nat. Mosc. 36 (2): 217--218. 1863. Callicarpa acuminatta H.B.K. apud Goyena, Fl. Nicarag. 2: 566, sphalm. 1911. Callicarpa minutiflora Rusby, Mem. N. Y. Bot. Gard. 7: 339. 1927. Callicarpa lancifolia Pav. ex Moldenke in Fedde, Repert. Spec. Nov. 40: 38, in syn. 1936 [not C. lancifolia Merr., 1915, nor Millsp., 1906]. Callicarpa subintegerrima Kunth ex Moldenke in Fedde, Repert. Spec. Nov. 40: 38, in syn. 1936. Aegiphila minutiflora Rusby ex Moldenke, Prelim. Alph. List Invalid Names 3, in syn. 1940. Callicarpa lancifolia Sessé & Moc. ex Moldenke, Prelim. Alph. List Invalid Names 11, in syn. 1940. Callicarpa acuminata DC., in herb. Callicarpha acuminata H.B.K., in herb.

Bibliography: Roxb., Hort. Beng. 10. 1814; H.B.K., Nov. Gen. & Sp. Pl. 2: 252--253. 1818; Steud., Nom. Bot., ed. 1, 137. 1821; Kunth, Syn. Pl. 2: 44--45. 1823; Spreng. in L., Syst. Veg., ed. 16, 1: 420. 1825; Schult., Mant. 3: 50--51. 1827; Spreng. in L., Syst. Veg., ed. 16, 5: 126. 1828; Roxb., Fl. Ind., ed. 2 [Carey], 1: 394. 1832; Kostel., Allgem. Mediz.-pharm. Fl. 3: 828. 1834; D. Dietr., Syn. Pl. 1: 428. 1839; Steud., Nom. Bot., ed. 2, 257. 1840; Hassk., Cat. Pl. Hort. Bot. Bogor. 136. 1844; Walp., Repert. 4: 126. 1845; Schau. in A. DC., Prodr. 11: 644. 1847; Rosenth., Syn. Pl. Diaph. 430. 1862; Turcz., Bull. Soc. Imp. Nat. Mosc. 32 (2): 217--218. 1863; Bocq., Adansonia 3: [Rev. Verbenac.] 192. 1863; Griseb., Cat. Pl. Cub. 216. 1866; Sauvalle, Fl. Cub. 112. 1868; W. B. Hemsl., Biol. Cent.-Am. Bot. 2: 538. 1881--1882; Kuntze, Rev. Gen. Pl. 2: 503. 1891; Sessé & Moc., Pl. Nou. Hisp. 2: 18. 1893; Jacks. in Hook. f. & Jacks., Ind. Kew. 1: 386. 1893;

Sessé & Moc., Fl. Mex., ed. 2, 17. 1894; Millsp., Field Columb. Mus. Publ. Bot. 1: 42. 1895; Briq. in Engl. & Prantl, Nat. Pflanzenfam. 4 (3a): 166. 1895; H. H. Rusby, Mem. Torrey Bot. Club 6: 106. 1896; Briq., Bull. Herb. Boiss. 4: 345. 1896; Just, Bot. Jahresber. 23 (2): 76 & 511. 1897; Goyena, Fl. Nicarag. 2: 566. 1911; Loes., Verh. Bot. Ver. Brand. 53: 81 [Abhandl. 246]. 1912; Bakh., Bull. Jard. Bot. Buitenz., ser. 3, 3: 22. 1921; P. C. Standl., Contrib. U. S. Nat. Herb. 23: 1253. 1924; N. L. Britton, Bull. Torrey Bot. Club 53: 463. 1926; H. H. Rusby, Mem. N. Y. Bot. Gard. 7: 339. 1927; P. C. Standl., Field Mus. Publ. Bot. 10: 335. 1931; Moldenke, Bull. Torrey Bot. Club 60: 55. 1932; Moldenke in Fedde, Repert. Spec. Nov. 39: 296, 302, & 307 (1936) and 40: 38—46, 77, 113—115, 118, 120—131, & 166. 1936; C. L. Lundell, Carnegie Inst. Wash. Publ. 478: [Veg. Petén] 47, 75, 109, 111, 113, 138, & 183. 1937; P. C. Standl., Field Mus. Publ. Bot. 18: 999. 1938; Moldenke, Alph. List Common Vern. Names 4, 13, 24—26, 31, & 33. 1939; Moldenke, Geogr. Distrib. Avicenn. 13, 15—17, 19, 23, 28, & 35. 1939; Moldenke, Suppl. List Common Vern. Names 5, 18, & 24. 1940; Moldenke, Prelim. Alph. List Invalid Names 3, 9, & 11—13. 1940; Moldenke, Carnegie Inst. Wash. Publ. 522: 198—200. 1940; Moldenke, Known Geogr. Distrib. Verbenac., ed. 1, 16, 19—23, 30, 31, 34, 40, 71, & 86. 1942; Moldenke, Alph. List Invalid Names 2 & 8—11. 1942; C. L. Lundell, Contrib. Univ. Mich. Herb. 8: 60. 1942; Moldenke, Phytologia 2: 72 & 93. 1945; Moldenke, Alph. List Cit. 1: 4, 7, 9, 29, 37, 41, 50, 58, 92, 98, 100, 104, 123, 133, 135, 148, 178, 194, 209, 210, 227—229, 231, 232, 240, 243, 262, 266, 273, 293, 299, 301, 307, 309, 312, 313, 315, 318, & 320. 1946; Moldenke, Phytologia 2: 334. 1947; H. N. & A. L. Moldenke, Pl. Life 2: 51 & 81. 1948; Moldenke, Alph. List Cit. 2: 329—331, 333—336, 339, 340, 342—344, 349—351, 389, 390, 418, 421, 423, 424, 426—429, 435, 437, 457, 459, 475, 477, 480, 490, 494, 503, 507, 526, 529, 549, 557, 566, 569, 573, 603, 607, 616, 625, 639, 642, & 643 (1948), 3: 656, 659, 664, 676, 677, 679, 696, 709, 714, 730, 740, 755, 757, 758, 768, 779, 785—787, 805, 806, 816—820, 834, 835, 842, 884, 886, 895, 900, 901, 903, 907, 918, 919, 925, 948, 959, 960, 962, 964, 965, 970, 973, & 974 (1949), and 4: 982, 988, 993, 999—1001, 1005, 1006, 1013, 1020, 1022, 1025, 1026, 1028, 1031, 1036, 1038, 1040—1042, 1048, 1052, 1053, 1055, 1057, 1058, 1061, 1065, 1067, 1069, 1070, 1077, 1078, 1082, 1094, 1097, 1131, 1138, 1142, 1151, 1171, 1236, 1239—1241, 1245, & 1291. 1949; Moldenke, Known Geogr. Distrib. Verbenac., ed. 2, 28, 34, 36, 37, 39—41, 58, 59, 62, 71, 96, 156, & 176. 1949; Matuda, Am. Midl. Nat. 44: 575. 1950; Moldenke, Bol. Soc. Venez. Cienc. Nat. 11: 291. 1950; Moldenke, Phytologia 3: 375. 1950; Bravo Hollis & Ramírez Cantú, Anal. Inst. Biol. Mex. 22: 421. 1951; Roig y Mesa, Dicc. Bot. 2: 996. 1953; Moldenke, Phytologia 4: 451. 1953; Moldenke, Résumé 34, 41, 43, 44, 46, 47, 49, 64, 65, 70, 79, 82, 113, 213, 230, 241, 244, 245, 247, & 443. 1959; Moldenke, Résumé Suppl. 5: 5. 1962; J. A. Clark, Card Ind. Gen. Sp. Pl. n.d.

Recent collectors describe this species as a woody shrub, 1—20 feet tall, wide-spreading, scrambling, or even scandent, or a

small, slender, or bushy tree, 4--10 m. tall, the trunk 3/4 to 3 inches in diameter, the bark tan-colored, the wood white, with a large pith, the young growth dusty-pubescent, the leaves membranous, dull-green or rich grass- to pale-green above, paler or grayish beneath, rugose, the inflorescence showy or rather showy, the flowers very small and fragrant, the calyx pale-green, the stamens yellow, and the fruit at first green, then red or reddish-violet, finally dark-purple, blue-black, or black when ripe, in dense clusters. Steyermark refers to the fruit as "berries", but they are drupes. The corolla is described as "whitish" on Martínez-Calderón 195, "creamy-white" on R. McVaugh 10489 and Ll. Williams 9814, "lilac and yellow" on Klug 3879, "violet and yellow" on Klug 4144, and "white" on P. H. Allen 2488 & 5284, Bequaert 26, Breedlove 6488, Cooper 220, Cuatrecasas 9462, Haught 2427 & 4868, R. M. King 3354, Leavenworth 226, Lundell & Lundell 7108, 7519, 7810, & 16402, Steere 1004, Steyermark 56771, and Yuncker 4883. Bequaert 26 is very densely pubescent and may possibly represent C. pringlei Briq.

Common and vernacular names recorded for C. acuminata are "albocar", "aurora", "axin", "blackberry", "Bonpland's Wirbelbeere", "ceniciento", "filigrana de piña", "flor de chichalaque", "fructa de chacha", "patzahumacachil", "pukil", "pukin", "sac pukim", "uva", "uvilla", "vara de alcalde", "vara del alcalde", "x puc yim", and "zacpukim". It should be noted that Roig y Mesa is authority for the name "filigrana de piña" in Cuba, which he refers to Callicarpa acuminata Roxb. It is most probable that he is referring here to C. americana L. or to C. roigii Britton, both of which are found in Pinar del Río, while the true C. acuminata is unknown from the island. The name C. acuminata Roxb. belongs in the synonymy of C. nudiflora Hook. & Arn., an Old World species.

The type of C. subintegerrima was probably collected somewhere in Colombia ["crescit in Regno Novo-Granatensis?", according to Kunth's original description] and is deposited in the Bonpland Herbarium at the Muséum National d'Histœire Naturelle at Paris.

The C. americana Sessé & Moc. included by me in the synonymy of C. acuminata in my 1936 work belongs actually in the synonymy of C. pringlei Briq. instead and the discussion of this name on p. 41 of my work should be so emended. The name, C. lancifolia Merr., mentioned in the synonymy above, is a synonym of C. merrillii Moldenke, but C. lancifolia Millsp. is a valid species. The C. mollis of Koorders is actually C. caudata Maxim., that of Matsamura is C. okinawensis Nakai, that of Shirasawa is xC. shirasawana Mak., while that of Siebold & Zuccarini is a valid species. Hasskarl records (1844) a "Callicarpus acuminata Hmb. Sprg." from Japan, but this is doubtless an error for Callicarpa nudiflora Hook. & Arn. (C. acuminata Roxb.).

Our plant has been found growing in forests or mountain forests, relic forests, light or tropical forests, thickets or open thickets,

old or occupied clearings, acahual, llanos, the alluvial soil in secondary matorral, secondary growth, lowland jungles, second growth on low sandy soil, tall brush, and the fringe of low forests on steep hills, along semidesert roadsides, on slopes and dry hillsides, at the edge of brush, and along village borders, at altitudes of 10 to 1800 meters, flowering from March to December, and fruiting in February, April to September, and November. R. M. King describes it as "locally abundant in open sun" in Alta Verapaz, Guatemala; Woytkowski found it "very abundant in forest" in San Martín, Peru; while McVaugh says "occasional in oak forest on limestone" in San Luis Potosí, and Crutchfield & Johnston found it gowing in "thorn forest on limestone slopes, infrequent along small creek" in Tamaulipas, Mexico. Standley (1931) says of it "occasional in swamps and thickets along the coast; ranging to Panama and Mexico", while later (1938) he says "occasional in thickets of the tierra caliente, Mexico to Bolivia".

One of the specimens of Gouin s.n., cited below, has its fruit modified into pubescent galls. The Tonduz s.n. [Herb. Inst. Physico-geogr. Nat. Costaric. 14882] cited by me on p. 42 of my 1936 work as from "Province undetermined", is actually from Limón, Costa Rica. The Holton 772 from "Las Cañas", Colombia, is said by Dugand to be from Valle del Cauca. The Goudot s.n. from "Coyajena", cited on p. 43 of the 1936 work, is from Coyaima in Tolima, Colombia. One of the Thieme 5507 specimens from Santa Bárbara, Honduras, cited on p. 42 as deposited in the United States National Museum at Washington, is now in the Marie-Victorin Herbarium at the University of Montreal. The Gaumer 1688, cited on p. 42 as from Yucatán, is actually from Quintana Roo, Mexico. E. P. Killip changed the number on Cuatrecasas "9402" in the United States National Herbarium to read "9462" on specific instructions from the collector.

Material of C. acuminata has been misidentified and distributed in herbaria under the names C. pringlei Briq., C. pringleii Briq., C. subpubescens Hook. & Arn., Clibadium sp., Psychotria hebeclada DC., and Viburnum americanum Mill.

The H.B.K. reference given in the bibliography of this species is often cited as "1817", but apparently should actually be "1818". The Rusby (1896) reference is cited as "Rusby, Bolivia Memoirs VI (1896) 106" at the Instituto Miguel Lillo in Tucumán.

In all, 528 herbarium specimens of C. acuminata, including type material of almost all the names involved, and 56 mounted photographs have been examined by me.

Additional & emended citations: MEXICO: Campeche: C. L. Lundell 895 (Ca—486976, Du—222626, E—1017115, F—700524, W—1494524), 1006 (Ca—486898, Du—224768, E—1017030, F—700607, W—1587064). Chiapas: Breedlove 6286 (Ac), 6488 (Z); Gilly & Hernandez Xolocotzi 146 (Mi), 151 (Mi); Matuda 1011 (Mh, Mi, N), 3641 (F—1026375, Mh, Mh, Mi, N). Hidalgo: O. M. Clark 7405 (Ok—18723); Schnooberger 8047 (Mi). Jalisco: Mexia 1108 (Ca—350067, Du—175412, E—960376,

F--689780, Gg--154936, La, W--1317854). Nuevo León: O. M. Clark 6814 (Ok--18717); Graham & Johnston 4640 (Mi). Oaxaca: Martínez-Calderón 195 (Ca--938137, Me, Rf); Nelson 2718 (W--228713); Orcutt 5221 (E--711862); J. V. Santos 2624 (Mi); Ll. Williams 9814 (F--898110, N). Quintana Roo: G. F. Gaumer 1688 (B); Lundell & Lundell 7810 (Mi, N, Rf). San Luis Potosí: M. T. Edwards 455 (Au, Du--278627, F--915215, N), 609 (Du--276821, F--915189); G. L. Fisher 45168 (Du--349953), 45169 (Ew); Hitchcock & Stanford 6946 (W--1806795); Kenoyer 4042 (Mi), A.608 (F--1000786), A.631 (F--1000043), s.n. [Tamazunchale, 8-29-38] (Fs); W. C. Leavenworth 226 (Mi, N, Ur, Ur); LeSueur 425 (F--1003633); Lundell & Lundell 7108 (Mh, Mi, N); R. McVaugh 10489 (Mi); J. Rzedowski 7827 (Ip, Ip). Tamaulipas: Barkley, Webster, & Paxson 864 (N); V. H. Chase 7587 (F--1001717, Fs, Mi, Ur); O. M. Clark 6814 (Fl--228); Crutchfield & Johnston 5799 (Mi); Dressler 1941a (Mi); Hitchcock & Stanford 6868 (Ca--710768, Du--315601, N, Or--54912, Pl--130110, Po--266850, Se--58670, Ur); Kenoyer & Crum 3292 (Mi), 3316 (Mi); Meyer & Rogers 2487 (N); Edw. Palmer 114 (Ca--717602, E--777546, F--436173, W--463050), 174 (Ca--153287, E--118813, F--217514, W--572404), 388 (Ca--145694, E--118816, F--217702, W--572619), 495 (E--778585, F--436429, W--463406); Rutten & Rutten-Pekelharing 494 (Ut); J. Rzedowski 10345 (Mi); Wooton s.n. [Buena Vista] (Mi--photo, W--989734). Veracruz: Ervendberg 212 (D--612060, P); Fournier s.n. [Laguna de Tampico, 1838] (P); Goldman 710 (W--397080); Gouin s.n. [1867] (P, P); Liebmann 11185 (W--1315035), 11186 (W--1315036), 11301 (W--1315084); Edw. Palmer 555 (W--463440); Paray 3159 (Ip); Purpus 4437 (Ca--143278, E--119224, E--119225, F--344052, W--841833), 8870 (Ca--218881, Du--206994, Po--194632); J. V. Santos 2401 (Mi), 2651 (Mi). Yucatán: Bequaert 26 (F--710785, W--1477671), 80 (I--photo); G. F. Gaumer 684a (E--951705), 870 (E--119268, F--36673, Us, W--571806), 1688 (E--852861, F--58486, W--1267404), 24071 (E--948114, F--552075, Po--174965, W--1268166), s.n. [Buena Vista, 1899] (F--187286, Gg--160439, Us, V); Langman 3932 (W--2022085); Linden s.n. [Juillet] (P); Lundell & Lundell 7519 (Du--363000, Ld, Mi, N); Steere 1004 (E--1087224, F--668493, La), 7177 (Me); Steggerda 15b (F--890493). State undetermined: Houstoun s.n. (P); Sessé, Mociño, Castillo, & Maldonado 517 (F--850927, Q). GUATEMALA: Alta Verapaz: R. M. King 3354 (Mi, N); Tejeda 128 (W--862087); Türckheim 8263 (E--119269, Mu--3967, W--398505, W--1323247). Chiquimula: J. A. Steyermark 31737 (F--1034965). El Petén: Aguilar Hidalgo 63 (Du--239585, E--1067855, F--712360); Contreras 2213 (Ld, S), 2705 (Ld, S), 3339 (Ld, S); C. L. Lundell 2088 (F--685323), 2344 (F--693905), 3027 (F--685956), 3635 (Mi), 3755 (F--689472, Gg--248095, Mi, S), 16402

(Ld, S). Izabal: H. Pittier 8622 (W--1013513); P. C. Standley 24399 (W--1150041). Zacapa: C. C. Deam 6300 (E--119218, Ed, F--285137, Vt, W--579609); Record & Kuylen G.130 (W--1315339, Y--10081). BRITISH HONDURAS: Chanek 198 (F--704949); Gentle 25 (F--696464), 199 (Mi, N); C. L. Lundell 4760 (F--683522); Winzerling III.3 (W--1266653). HONDURAS: Atlántida: E. R. Mitchell 70 (F--580597); P. C. Standley 55185 (F--583273, W--1408711). Comayagua: J. P. Edwards P.616 (B, Ca--522750, F--688148, W--1588697). Cortés: Yuncker 4883 (Dp, E--1087012, F--749089). Santa Bárbara: Thieme 5507 (W--355042, W--1323251). BAY ISLANDS: Roatan: G. F. Gaumer 64 (Sg--16054, W--56137). COSTA RICA: Cartago: J. León 1597 [Herb. Inst. Interamer. Turrialba 596] (W--2021476), 1685 [Herb. Inst. Interamer. Turrialba 871] (W--2021491); H. Pittier 3173 (Br, Br); Standley & Valerio 46750 (W--1254834). Limón: Kuntze 1968 (F--297690); Morley 809 (Ca--756765); H. Pittier 4254 (W--1323253), s.n. [Herb. Inst. Physico-geogr. Nat. Costaric. 9741] (Br, Br, W--1323255), s.n. [Herb. Inst. Physico-geogr. Nat. Costaric. 12688] (W--1323252); J. D. Smith 6629 (W--1323249); F. L. Stevens 732 (W--1166552). Puntarenas: P. H. Allen 5284 (N); Brenes 12267 (F--855893), 12339 [218 & 818] (F--856001); Cufodontis 117 (N); Tonduz 6819 (Br, W--1323250); M. Valerio 422 (F--668656). San José: Tonduz 7479 (W--355566, W--1323248), s.n. [Herb. Inst. Physico-geogr. Nat. Costaric. 12788] (W--354272, W--3587146). PANAMA: Bocas del Toro: G. P. Cooper 555 (F--579658, W--1521698, Y--12188); H. von Wedel 2666 (N). Canal Zone: Piper 5457 (W--1166031, W--1166032). Coclé: P. H. Allen 2488 (N). Colón: G. P. Cooper 220 (Ca--549869, F--765683, H--38652, N), 220a (F--765684, N), 654 (F--579218, W--1521215, Y--12287). Panamá: H. Pittier 5520 (W--715771). PEARL ISLANDS: San José: C. O. Erlanson 5 (N). COLOMBIA: Antioquia: Brahe, Araque Molina, & Barkley 18C704 (N); Haught 4868 (W--1709525); Toro Toro 1293 (Fn--1666). Cauca: Triana 3712 [1; 186] (Jc). Cundinamarca: Mutis 4707 (Cb, F--712886, W--1561452). Norte de Santander: Schlim 719 (B--photo, Br, S--photo, W--1628268). Tolima: Bonpland 1694 [Macbride photos 39492] (F--1038391--photo of type & isotype, Kr--photo of type & isotype, N--photo of type, N--photo of type & isotype, P--isotype, S--photo of type, Z--photo of type), s.n. [Quindiu] (P); Cuatrecasas 9462 ["9402"] (W--1850801); Hartweg 1315 (Lu); Haught 2427 (N). Valle del Cauca: Cuatrecasas 22883 (F--1341700); F. C. Lehmann 7703 (F--578235, W--938508), K.286 (F--578236). Department undetermined: Bonpland s.n. (E--photo, N--photo, P, P, Z--photo); Linden 1196 (Br). VENEZUELA: Lará: Badillo 472 (Ve). Trujillo: J. A. Steyermark 56771 (N). ECUADOR: Los Ríos: Asplund 5410 (S, W-1930520). PERU: San Martín: Klug 3879 (E--1104815, F--766387, Gg-248620, I, N, S, W--1458287), 4144 (Ca--710140, E--1110840, F--

853163, Gg--247856, I, N, S, W--1458558); Ll. Williams 6817 (N); Woytkowski 5458 [wood voucher 15524] (W--2413474), 7283 (W--2453294). Department undetermined: Herb. Pavon s.n. [Peruvia] (X). BOLIVIA: La Paz: M. Bang 1669 (E--119256, Ed, F--77781, Mu-1730, Pa, Vu, W--56135, W--56136); M. Cárdenas 1768 (W--1232416). CULTIVATED: Austria: Herb. Hort. Schönbrunn s.n. (V); Herb. Hort. Vindob. s.n. [9/1803] (V).

CALLICARPA ACUTIDENS Schau. in A. DC., Prodr. 11: 645. 1847.

Bibliography: Schau. in A. DC., Prodr. 11: 645. 1847; Jacks. in Hook. f. & Jacks., Ind. Kew. 1: 386. 1893; P. Dop, Bull. Soc. Hist. Nat. Toulouse 64: 498--501, 505--506, & 512. 1932; Moldenke, Known Geogr. Distrib. Verbenac., ed. 1, 58 & 86 (1942) and ed. 2, 135 & 176. 1949; Moldenke, Résumé 175 & 443. 1959.

Branchlets densely grayish floccose-tomentose; leaves lanceolate-oblong, about 7.5 cm. long and 4 cm. wide, short-petiolate, narrowly acuminate at the apex, obtuse at the base, unequally dentate along the margins with slender, straight, very acute teeth about 2 mm. long, glabrate and shiny above, pale and glandular-punctate beneath, densely grayish floccose-tomentose on the veins; cymes lax, corymbose, pedunculate, much shorter than the subtending leaves.

The type of this poorly known species was collected by Charles Gaudichaud-Beaupré in Cochinchina and is deposited in the DeCandolle Herbarium at the Conservatoire et Jardin Botaniques at Geneva. Schauer states that a duplicate of the type is deposited in the Kunth herbarium (Berlin), but admits that the species is based on imperfect specimens. He claims that the teeth on the leaf-margins render the species very distinct.

Dop (1932) cites Eberhardt 2621 and Gaudichaud 125 [probably the type] from Annam, Indochina, and comments: "Cette espèce est voisine du C. macrophylla Vahl. En particulier la présence sur les deux faces de la feuille de poils étoilés rapproche nettement les deux espèces. Dans la revision Bakhuizen van der Brink C. acutidens tombe au rang de synonyme de C. cuspidata Roxb. Or celle dernièr espèce est définie par cet auteur comme ayant des poils simples à la face supérieure des feuilles. C'est même ce caractère qui lui permet dans sa clé de séparer C. cuspidata de C. macrophylla. Il y a là une erreur évidente C. acutidens ne peut être réduit au C. cuspidata, mais placé à côte de C. macrophylla, dont la dimension des feuilles et leur découpure marginale la séparent nettement. Il est à remarquer que dans la forme littorale de Tourane, la feuille est un peu plus épaisse et le tomentum plus abondant que dans la forme de Thua Lun; mais dans les deux cas, le caractère du trichome est constant."

The species is known to me only from the literature.

CALLICARPA ACUTIFOLIA Chang, Acta Phytotax. Sin. 1: 284. 1951.

Bibliography: Chang, Acta Phytotax. Sin. 1: 284. 1951; G. Taylor, Ind. Kew. Suppl. 13: 21. 1966.

Nothing is known to me about this taxon except that it is supposed to be native to Kwangtung, China. The original publication has not as yet been available to me for consultation.

CALLICARPA ALBIDO-TOMENTELLA Merr., Philip. Journ. Sci. Bot. 12: 300--301. 1917.

Bibliography: E. D. Merr., Philip. Journ. Sci. Bot. 12: 300--301. 1917; E. D. Merr., Enum. Philip. Pl. 382. 1923; A. W. Hill, Ind. Kew. Suppl. 6: 34. 1926; Moldenke, Known Geogr. Distrib. Verbenac., ed. 1, 61 & 86 (1942) and ed. 2, 140 & 176. 1949; Moldenke, Résumé 182 & 443. 1959.

Shrub, about 2 m. tall; branches terete, grayish, glabrous; branchlets very densely and minutely grayish- or whitish-puberulent with stellate indumentum; leaves decussate-opposite; petioles 4--5 mm. long, densely stellate-puberulent; leaf-blades membranous, lanceolate, 7--11 cm. long, 1.5--2.5 cm. wide, gradually narrowed upwards to the slenderly and sharply acuminate apex, entire, narrowed below to the obtuse base, the base of some leaves slightly inequilateral, the upper surface brownish-olivaceous, glabrous, slightly shiny, the lower surface entirely covered with very dense and minute grayish or whitish puberulence, the indumentum stellate; secondaries 5 or 6 per side, slender, ascending, impressed above; veinlet reticulation loose and very obscure above, entirely obscured by the indumentum beneath; inflorescence axillary, 1.5--2 cm. long, slender, pedunculate, dichotomous, few-flowered, densely stellate-puberulent, the peduncles surpassing the primary branches in length; pedicels slender, 1--1.2 mm. long; prophylla acicular, nearly as long as the pedicels; fruiting-calyx shallow, about 2 mm. wide, densely stellate-puberulent at the base on the outer surface with very short white hair, the rim truncate or very obscurely 4-denticulate; fruit subglobose, purplish when fresh, about 2.5 mm. wide, glabrous.

The type of this little-known species was collected by Maximo Ramos [Herb. Philip. Bur. Sci. 26976] along a small stream in the forest, at an altitude of about 120 meters, on Mount Posuey, in the province of Abra, Luzon, Philippine Islands, on February 5, 1917, and was deposited in the herbarium of the Philippine Bureau of Science at Manila, but is now destroyed. Merrill (1917) states that this is "a most characteristic species, distinguished by its white or grayish-white, very short, dense indumentum, and its entire, lanceolate, membranous leaves which are entirely glabrous on the upper surface. It somewhat resembles C. angusta Schauer, but is not closely allied to that species." Nothing is known to me of this plant except what is given in the literature.

CALLICARPA ALONGENSIS Dop, Bull. Soc. Hist. Nat. Toulouse 64: 509. 1932.

Bibliography: P. Dop, Bull. Soc. Hist. Nat. Toulouse 64: 500, 501, 509, 511, & 512. 1932; A. W. Hill, Ind. Kew. Suppl. 9: 45. 1938; Moldenke, Known Geogr. Distrib. Verbenac., ed. 1, 58 & 86 (1942) and ed. 2, 135 & 176. 1949; Moldenke, Résumé 175 & 443. 1959.

Shrub; branchlets subtetragonal, lightly fulvous-pubescent;

leaves decussate-opposite; petioles 6--10 mm. long; leaf-blades chartaceous, rigid, 10--13 cm. long, 2--3 cm. wide, acute and acuminate-caudate at the apex, denticulate along the margins except at the base, attenuate and acute at the base, stellate-pubescent above when immature, but glabrous and brunneous when mature, lightly short-tomentose beneath with whitish stellate hairs; midrib prominent beneath; secondaries slender, 20--22, ascending, recurved; tertiaries subparallel; veinlet reticulation conspicuous; inflorescence cymose; peduncles 1 cm. long; cymes many-flowered, 2--2.5 cm. long, 1.5--2 cm. wide, dichotomous, fulvous stellate-pubescent; bractlets minute, subulate; flowers very small; calyx conic, 1 mm. long, stellate-tomentose, the rim truncate, very minutely 4-toothed; corolla 2 mm. long, covered on the outside with stellate and simple hairs, the tube broad, the lobes 4, rounded, 0.5 mm. long; stamens 4, long-exserted; filaments inserted at the base of the corolla-tube; anthers scarcely glandulose; style equaling the stamens; stigma infundibular; ovary stellate-pubescent and glandular; drupes black, 1 mm. wide, stellate-pubescent.

The type of this species was collected by O. Debeaux (no. 300) in rock-clefts on Surprise Island, in the Bay of Along, Tonkin, Indochina. Dop (1932) comments that "Cette espèce est voisine du C. acuta Schauer var. typica H. J. Lam des Philippines. Elle s'en distingue nettement par ses feuilles plus petites, munies à la face inférieure d'un tomentum plus fin et non farineux, et par ses fleurs de moitié plus petites. On peut la considérer comme une espèce géographique dérivée du C. acuta." The species to which he refers here is probably C. angusta Schau.

I know nothing of C. alongensis except what is given in the literature quoted above.

CALLICARPA AMERICANA L., Sp. Pl., ed. 1, 1: 111. 1753 [not C. americana Blanco, 1884, nor Hort., 1936, nor Lour., 1794, nor Sessé & Moc., 1893].

Additional & emended synonymy: Anonymos baccifera verticillata, folio molli et incano, ex America Pluk., Almagest. Bot. 33, pl. 136, fig. 3. 1696. Frutex baccifer verticillatus, foliis scabris latis dentatis et conjugatis Catesb., Carol. 2: 47. 1733. Frutex foliis amplis subrotundis acuminatis ex adverso binis, viminibus lentis infirmis, quasi levi canitie tectis Gronov., Fl. Virg. 138. 1739. Johnsonia floribus verticillatus sessilibus T. Dale ex P. Mill., Gard. Dict., ed. 7. 1759. Burchardia callicarpa Crantz, Inst. Rei Herb. 2: 360. 1766. Callicarpa fol. serratis subtus tomentosus L., Mant. 2: 33, 198, & 331. 1767. Johnsonia americana Mill., Gard. Dict., ed. 8. 1768. Frutex baccifer verticillatus, foliis scabris latis dentatis & conjugatis Catesb. apud Houtt., Lin. Pfl. Syst. 3: 101, in syn. 1778. Callicarpa foliis serratis, subtus tomentosis L. apud Houtt., Lin. Pfl. Syst. 3: 101, in syn. 1778. Anonymos baccifera verticillata, folio molli & incano, ex

America Pluk. apud Houtt., Lin. Pfl. Syst. 3: 101, in syn. 1778. Frutex foliis amplis subrotundis acuminatis ex adverso binis, viminibus lentis infirmis quasi leni canitie tectis Gronov. apud Houtt., Lin. Pfl. Syst. 3: 101, in syn. 1778. Callicarpa foliis ovatis acutis serratis, subtus subtomentosis, baccis glomeratis Lam., Encycl. Méth. Bot. 1: 563. 1783. Callicarpa foliis serratis subtus tomentosis L. apud J. A. Murr. in L., Syst. Veg., ed. 14, 153, in syn. 1784. Anonymus &c. Pluk. apud Vitm., Sum. Pl. 1: 307, in syn. 1789. Frutex &c. Catesb. apud Vitm., Sum. Pl. 1: 307, in syn. 1789. Anonymus baccifera, verticillata, folio molli, & incano Pluk. apud Lour., Fl. Cochinch., ed. 1, 1: 70, in syn. 1790. Anonymos baccifera verticillata, folio molli & incano Pluk. apud Gaertn., Fruct. & Sem. Pl. 2: 80, in syn. 1791. Frutex baccifer verticillatus foliis scabris latis dentatis & conjugatis Catesb. apud Gaertn., Fruct. & Sem. Pl. 2: 80, in syn. 1791. Anonymus baccifera, verticillata, folio molli et incano Pluk. apud Lour., Fl. Cochinch., ed. 2, 1: 88, in syn. 1793. Callicarpa serrata Moench, Meth. 468. 1794. Callicarpa viburnifolia Salisb., Prodr. Stirp. Chap. Allert. 53. 1796. Johnsonia (americana) floribus verticillatis sessilibus, foliis ovato-lanceolatis oppositis, caule fruticoso Mill. apud Willd., Linn. Sp. Pl. 1: 619, in syn. 1797. Anonymus baccifera verticillata, folio molli et incano, ex America Pluk. apud Willd., Linn. Sp. Pl. 1: 619, in syn. 1797. Frutex baccifer verticillatus, foliis scabris latis dentatis et coniugatis Catesb. apud Willd., Linn. Sp. Pl. 1: 619, in syn. 1797. Frutex foliis amplis subrotundis acuminatis ex adverso binis, viminibus lentis infirmis quasi leni canitie tectis Gronov. apud Willd., Linn. Sp. Pl. 1: 619, in syn. 1797. Callicarpa americana; foliis ovatis acuminatis inaequaliter obtuse dentatis basi cuneato-attenuatis integerrimis subtus ramulisque leviter tomentosis, calycibus nudiusculis Willd. apud Roem. & Schult., Syst. Veg. 3: 93, in syn. 1818. Callicarpa ramis pruinoso-tomentosis, foliis lato-ovalibus, utrinque acutis, dentatis subtus subtomentosis, cymis sessilibus petiolo brevioribus Michx. apud Roem. & Schult., Syst. Veg. 3: 93, in syn. 1818. Callicarpa americana Willd. ex Roxb., Fl. Ind., ed. 1 [Carey & Wall.], 1: 407, in obs. 1820. Johnsonia americana Moench ex Steud., Nom. Bot., ed. 1, 137, in syn. 1821. Anonymos baccifera etc. Pluk. apud Walp., Repert. 4: 127, in syn. 1845. Frutex baccifer verticillatus etc. Catesb. apud Walp., Repert. 4: 127, in syn. 1845. Callicarpa americana (var.) purpurea F. J. Muller, Am. Gard. 10: 463. 1889. Burchardia americana Duham. apud Jacks. in Hook. f. & Jacks., Ind. Kew. 1: 361, in syn. 1893. Callicarpa amerikana L. ex Moldenke in Fedde, Repert. Spec. Nov. 39: 304, in syn. 1936. Callicarpa villosa Baldw. ex Moldenke in Fedde, Repert. Spec. Nov.

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